

FIG. 1

The diagram illustrates the structure of an AV Stream (MPEG 2 TS) over a time interval $t = < 0.7\text{sec}$. The stream is composed of Transport Packets (TP) and PES Packets. The TP packets are organized into groups, with some containing a PCR (Program Clock Reference) field. The PES Packets are organized into groups, with some containing a PTS (Presentation Time Stamp) field. The diagram shows the mapping from the TP packets to the PES Packets, and from the PES Packets to the Text Units. The Text Units are organized into groups, with some containing a PTS field. The diagram also shows the mapping from the Text Units to the Subtitle (Text File).

AV Stream
(MPEG 2 TS)

$t = < 0.7\text{sec}$

TP

PCR

PES Packet

PTS

Text Unit

Subtitle
(Text File)

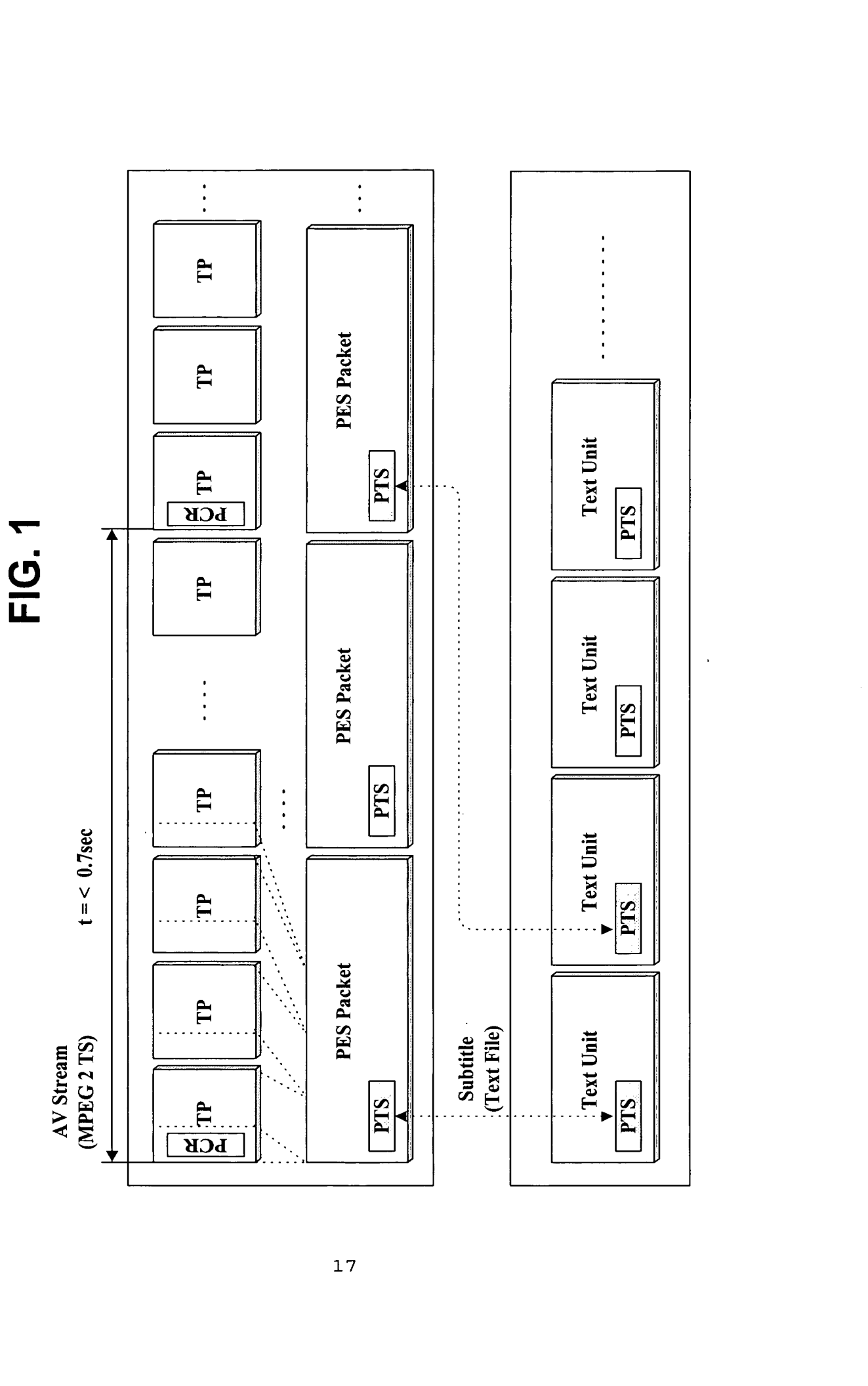


FIG. 2

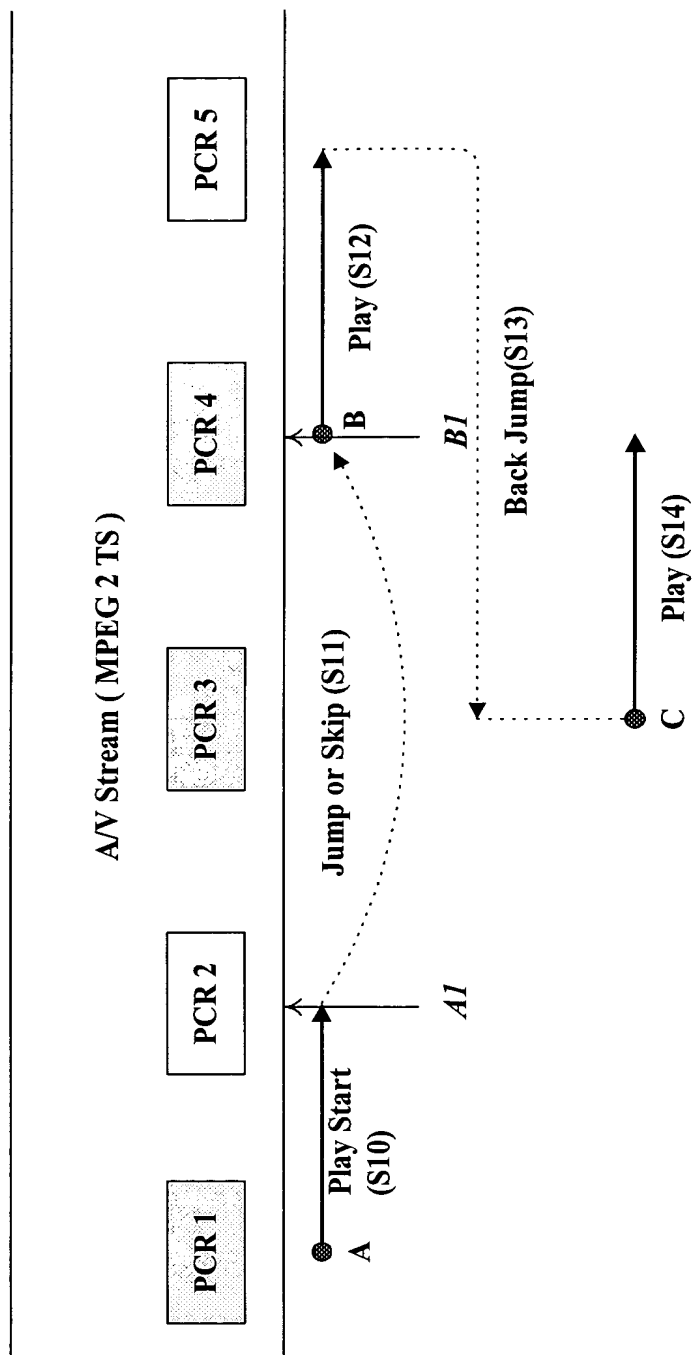


FIG. 3

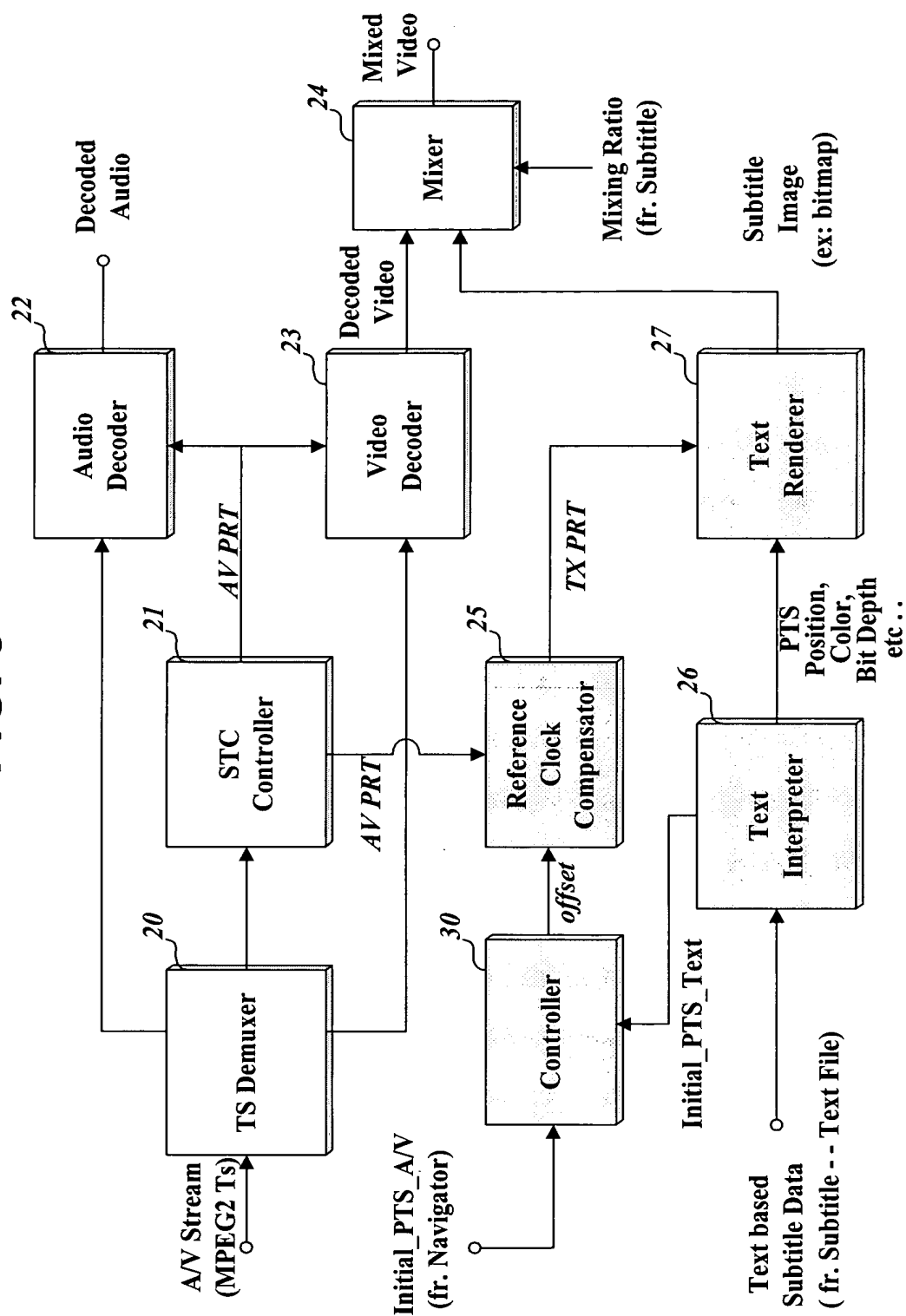


FIG. 4a

```
<?XML version = "1.0" ?>
<SUBTITLES>
  <SUBTITLE>
    <LYLIC sync="100" color="0x20" duration="1000">
      Let the word go forth </LYLIC>
    </SUBTITLE>
  <SUBTITLE>
    <LYLIC sync="1500" duration="1200">
      He has been passed to a new generation of Americans </LYLIC>
    </SUBTITLE>
  </SUBTITLES>
```

FIG. 4b

```
<?XML version = "1.0" ?>
<SUBTITLES>
  <SUBTITLE>
    <LYLIC sync="100" color="0x20" duration="1000">
      Let the word go forth </LYLIC>
    <script type="text/javascript" src="effect.js">
      <!--
        bd.effect.fade_in("Let the word go forth");
      // -->
    </script>
  </SUBTITLE>
  <SUBTITLE>
    <LYLIC sync="1500" duration="1200">
      He has been passed to a new generation of Americans </LYLIC>
    <script type="text/javascript" src="effect.js">
      <!--
        bd.effect.fade_in("He has been passed to a new generation . . .");
      // -->
    </script>
  </SUBTITLE>
</SUBTITLES>
```

401

402